

## What is claimed is:

1. A composition comprising effective amount of  
5 extracts from *Flos Lonicerae Fructus Forsythiae* and  
*Radix Scutellariae* and a suitable carrier.
2. An antiviral and antibacterial pharmaceutical  
composition comprising effective amount of *Flos*  
10 *Lonicerae Fructus Forsythiae* and *Radix Scutellariae*  
and a pharmaceutically acceptable carrier.
3. A composition of claim 1 or 2, wherein the ratio of  
is approximately 1:2:1.
4. A method for identifying the composition of *Flos*  
15 *Lonicerae* raw material, which comprises the steps  
of:
  - a) Using Chlorogenic acid as the standard and  
using *Flos Lonicerae* raw material as a  
sample;
  - b) Preparing the sample solution of *Flos*  
20 *Lonicerae* raw material;
  - c) performing the Fingerprint Chromatogram (HPLC-  
FPS) of *Flos Lonicerae* raw material under the  
following conditions:

## Conditions of Raw Material HPLC-FPS

Chromato- graphic Column	Protectin g Column	Floating Phase	Tempera- ture	Inspector	Injection Volum	Run Time (min)
Inertial ODS-3,5 $\mu$ m 4.6mm*250mm	phenomene x C18 (ODS) 4mm*3mmID	1% acetic acid solution	room tempera- ture	PDA210~400nm of wavelength scan	5.00 $\mu$ l	35

- 25 d) calculating the value in accordance with the  
following calculating formula:  

$$Cx = C1 + (C2 - C1) * (Ax - A1) / (A2 - A1)$$

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C1 and C2: quantities of the standard.

A1 and A2: peak areas of the standard.

Cx and Ax: quantity and peak area of the sample.

- 5 e) The HPLC-FPS of Flos Lonicerae raw material:  
The amounts of peaks are 8 at low limit and 11 at high limit, when the peak area is over  $2.0 \times 10^6$ .

10 5. A method for identifying the composition of Fructus Forsythiae raw material, which comprises the steps of:

- a) using Phillyrin as the standard, and use the Chinese Fructus Forsythiae raw material as the sample;  
b) weighing exactly 375mg of the powder of Fructus Forsythiae raw material;  
15 c) performing HPLC-FPS of Fructus Forsythiae raw material wherein the amounts of peaks are 11 at low limit and 14 at high limit, when the peak area is over  $2.0 \times 10^6$ .

20 6. A method for identifying the composition of Radix Scutellariae raw material, which comprises the steps of:

- a) using Baicalin as the standard and use the Chinese Radix Scutellariae as the sample;  
25 b) weighing appropriate amount of Radix Scutellariae raw material and prepare the sample solution;  
d) performing the HPLC-FPS of Radix Scutellariae raw material and calculating the value of HPLC-FPS of Radix Scutellariae's raw material wherein there are  
30 22 peaks at low limit and 25 at high limit, when the peak area is over  $2.0 \times 10^6$ .

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7. A method for identifying the composition comprising extracts of Flos Lonicerae and Fructus Forsythiae, which comprises the steps of:

a) using the Chlorogenic acid and Phillyrin respectively as the standard, and use the extracts of Flos Lonicerae and Fructus Forsythiae as a sample.

b) preparing the sample solution of the drug substance, further comprising the steps of:

i) taking some Flos Lonicerae and Fructus Forsythiae, rub it into powder and then pass the 40 item of bolt.

ii) weighing exactly appropriate amount of the powder and put it into the centrifuge tube.

iii) adding appropriate amount of organic solvent to dissolve the extract;

iv) Shaking the mixture ultrasonically and take the upper solution;

v) repeating the above extraction procedure if necessary;

vi) Washing the residue with the organic solvent and combine the extract;

vii) filtering the extract if necessary;

c) performing the HPLC-FPS of the drug substance of Flos Lonicerae and Fructus Forsythiae, under the following conditions:

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Conditions of HPLC-FPS of Drug Substance

Chromato-graphic Column	Protectin g Column	Floating Phase	Tempera -ture	Inspector	Injectio n Volum	Run Time (min)
Inertsil	phenomene	1%	room	PDA210~400n	20.00μl	35
ODS-3, 5μm	x	acetic	tempera	m whole		
4.6mm*250mm	C18 (ODS),	acid	-ture	wavelength		
	4mm*3mmID	solution		scan		

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d) determining the peaks created by the analysis wherein the amounts of peaks are 18 at low limit and 23 at high limit, when the peak area is over  $2.0 \times 10^6$ .

5 8. A method for identifying with HPLC-FPS the composition of the drug substance of Radix Scutellariae, which further comprises the steps of:

- a) using Baicalin as the standard solution and use the extract of Radix Scutellariae as the sample solution;
- 10 b) weighing exactly 20 mg of the powder of Radix Scutellariae and preparing the sample solution of the extract;
- c) Performing the HPLC-FPS of the Radix Scutellariae extract;
- 15 d) determining the profile of HPLC-FPS of Radix Scutellariae extract, wherein the amounts of peaks are 4 at low limit and 5 at high limit, when the peak area is over  $2.0 \times 10^6$ .

20 9. A method for preparing a pharmaceutical composition of Fructus Forsythiae and Flos Lonicerae, wherein the drug substance of Fructus Forsythiae and Flos Lonicerae was prepared with CO<sub>2</sub> supercritical fluid extraction under the control of homogeneous design.

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10. A method of claim 9, further comprising the steps of:

(a) preparing the composition with CO<sub>2</sub> supercritical fluid extraction with or without aqueous alcohol under the following conditions: 8.0-14.0MP of pressure, at 32-40°C of

30 temperature for 1-3 hours; (b) breaking the materials into 20-60 mesh of reduction ratio and (c) obtaining a 0.1-1% of extract rate.

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11. A method of claim 9, wherein the composition of Fructus Forsythiae and Flos Lonicerae was prepared with CO<sub>2</sub> supercritical fluid extraction containing the amount of aqueous alcohol entrainment, which is equal to 10%-90% CO<sub>2</sub>.

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12. A method for embedding with CO<sub>2</sub> supercritical fluid extraction the supercritical extract of Fructus Forsythiae and Flos Lonicerae, wherein the supercritical extract was embedded with saturated solution of  $\beta$ -cyclodextrin and the embedding rate is about 60%.

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13. A method for preparing the composition of Fructus Forsythiae and Flos Lonicerae comprising the steps of: (a) Embedding the supercritical extract of Fructus Forsythiae and Flos Lonicerae with saturated solution of  $\beta$ -cyclodextrin; (b) Determinating the benzene content; (c) Granulating with solid dispersion technique.

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14. A method of claim 9, wherein the active ingredients of the supercritical extracts comprising  $\beta$ -pinene, sabinene,  $\alpha$ -pinene and linalool.

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15. A method for preparing the a pharmaceutical composition comprising Fructus Forsythiae and Flos Lonicerae with subboiling aqueous extraction under the following conditions: about 80-95°C of temperature and 1-3 hours of time.

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16. A method for purifying the sample solution with flocculating process, wherein the process was performed under the following conditions: the amount of flocculant is about 0.5g-3.5g/100g of raw material and when the flocculant is added the specific gravity of the sample solution is 1.01-1.35, wherein the temperature of the

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sample solution with the flocculant is 35-80°C and the concentration of aqueous alcohol is about 70-95% and the specific gravity of the sample solution is 1.1-1.3, when the aqueous alcohol is added.

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17. A method for determining with chromatography the content of Chlorogenic Acid in the Flos Lonicerae raw material comprising the steps of:

- a) using Chlorogenic acid as the standard solution and use Flos raw material as the sample solution.
- b) preparing the sample solution;
- c) performing the HPLC of Chlorogenic Acid content of Flos Lonicerae raw material under the condition:

Conditions of HPLC-FPS of Raw Material Content

Chromato- graphic Column	Protectin g Column	Floating Phase	Tempera- ture	Velocity of flow	Testing Wavelength h	Run Time (min)
Inertsil	phenomene	methanol:	room	1ml/min	280nm	35
ODS-3,5µm	x	water=25:75	tempera-			
4.6mm*250m	C18(ODS)	(contains	ture			
m	4mm*3mmID	2% acetic acid)				

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- d) determining the content of Chlorogenic Acid of Flos Lonicerae raw material:

Example: i) 1.85%; ii) 2.34%; iii) 1.51%. The result of the content is about 1.05%-1.68%.

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18. A method for determining with chromatography the content of Phillyrin of Fructus Forsythiae raw material comprising the steps of:

- a) Using Phillyrin as the standard solution and use Fructus Forsythiae raw material as the sample solution.
- b) taking appropriate amount of the powder of Fructus Forsythiae and preparing the sample solution;

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- c) performing the HPLC of Fructus Forsythiae raw material under the appropriate conditions;  
d) determining the content of Phillyrin of Fructus Forsythiae raw material wherein the content is about  
5 0.10%-0.40%.

19. A method for determining with chromatography the content of Baicalin of Radix Scutellariae raw material comprising the steps of:

- 10 a) using Baicalin as a standard and Radix Scutellariae raw material as a sample.  
b) preparing sample solution comprising the radix scutellariae;  
c) perform the HPLC of Radix Scutellariae raw material  
15 under the appropriate conditions; and  
d) determining the content of Baicalin of Radix Scutellariae raw material, wherein the content is about 3.01%-4.47%.

20 20. A method for determining with chromatography the Chlorogenic Acid content of composition of Fructus Forsythiae and Flos Lonicerae comprising the steps of:

- a) using the composition of Fructus Forsythiae and Flos  
25 Lonicerae as a sample.  
b) preparing the sample solution having the composition of Flos Lonicerae and Fructus Forsythiae  
c) Calculate Chlorogenic Acid content of the sample according to the formula of claim 1.  
30 d) Determining Chlorogenic Acid content, wherein the chlorogenic acid content is about 1.00%-3.30%.

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21. A method for determining with chromatography the content of Phillyrin of the composition of Fructus Forsythiae and Flos Lonicerae comprising the steps of:

- 5 a) preparing the sample solution comprising Fructus Forsythiae and Flos Lonicerae;  
b) calculating the Phillyrin content of the sample and  
c) determining Phillyrin content of the drug substance,  
wherein the Phillyrin content is about 0.2%-0.5%.

10 22. A method to determine by chromatography the content of Baicalin in the drug substance of Radix Scutellariae comprising the steps of:

- a) preparing the sample solution comprising Radix Scutellariae;  
15 b) calculating Baicalin content of the sample; and  
c) determining Baicalin content of the drug substance  
wherein the Baicalin content is about 90.01%-93.40%.

20 23. A method for determining with chromatography the content of supercritical extract from of Fructus Forsythiae and Flos Lonicerae, comprising the steps of:

- a) Determine the relative content under the following conditions:  
i) Gas Chromatographic: SE-54 elastic quartz  
25 capacity. Chromatographic column with a 30-meter length and a 0.32mm inner diameter. Gasification room temperature of 250°C. Column temperature ranges from 50-230°C rising 4°C/min controlled by procedure.  
ii) Gas carried to be Nitrogen with pre-column  
30 pressure of 0.7kg/cm.  
iii) Column vollumn of 2ml/min, giving sample quality of 0.4ul.  
b) Content of supercritical extract of Fructus Forsythiae and Flos Lonicerae:

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- i) Contrast with the standard sample when  $t_R=8.551\text{min}$ ,  $\beta$ -pinene can be obtained. When  $t_R=12.926\text{min}$ , linalool can be obtained. The absolute peak area is about 766933.
  - 5 ii) Contrast with the standard sample when  $t_R=8.575\text{min}$ ,  $\beta$ -pinene can be obtained. When  $t_R=12.919\text{min}$ , linalool can be obtained. The absolute peak area is about 1138138.
  - 10 iii) Contrast with the standard sample when  $t_R=8.539\text{min}$ ,  $\beta$ -pinene can be obtained. When  $t_R=12.930\text{min}$ , linalool can be obtained. The absolute peak area is about 906224.
  - c) GC-Chromatograph is given in Figure 8.
- 15 24. A method for determining with GC-MS the supercritical extract of *Fructus Forsythiae* and *Flos Lonicerae*, wherein the values of GS-MS of the supercritical extract were shown in the following examples:  
 $\beta$ -pinene should be obtained at 8.551 min of RT (Retention  
20 Time). Linalool should be obtained at 12.926 min of RT. The absolute peak area is about 766933;  
 $\beta$ -pinene should be obtained at 8.575 min of RT. Linalool should be obtained at 12.919min of RT. The absolute peak area is about 1138138;  
25  $\beta$ -pinene should be obtained at 8.539 min of RT. Linalool should be obtained at 12.930 min of RT. The absolute peak area is about 906224.
- 30 25. A composition deriving from raw herbal materials comprising about 1 part of *Flos Lonicerae*, 2 parts of *Fructus Forsythiae* and 1 part of *Radix Scutellariae*.

26. A formula of a product comprising about 90-180 parts of soft extract of *Flos Lonicerae* and *Fructus Forsythiae*, about 10-60 parts of supercritical extract of *Flos Lonicerae* and *Fructus Forsythiae*, about 30-50 parts of  
5 *Radix Scutellariae* extract and about 23-125 parts of excipients.

27. A composition of 25 or 26 for preparing a product product, wherein said constituents are presented in the  
10 following range: about 0.01 percent to about 99.99 percent of effective constituents, and about 99.99 percent to 0.01 percent of medical excipients.

28. A composition as in claim 25, wherein said  
15 constituents are presented in the following formula: about 10 percent to 100 percent of *Flos lonicerae*, 10 percent to 100 percent of *Fructus Forsythiae*, and 10 percent to 100 percent of *Radix Scutellariae*.

29. A composition as in claim 25, wherein said  
20 constituents are further composed of about 1.3 percent to 1.6 percent of Chlorogenic acid, 0.2 percent to 0.3 percent of Phillyrin and about 14.1 percent to 15.3 percent of Baicalin.

30. An antiviral composition for inhibition of comprising  
25 herbals of *Radix Scutellariae*, *Fructus Forsythiae* and *Flos Lonicerae*.

31. The composition of claim 30, wherein virus is herpes I  
30 virus, herpes II virus, influenza virus, parainfluenza virus or Human immunodeficiency virus.

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3'2. An antibacterial composition for inhibition of  
comprising herbals of Radix Scutellariae, Fructus  
Forsythiae and Flos Lonicerae.

5 add B1

add  
C1

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